OPTICALLY ACTIVE COMPOUND, LIQUID CRYSTAL COMPOSITION CONTAINING THE SAME, LIQUID CRYSTAL ELEMENT HAVING THE SAME COMPOSITION AND LIQUID CRYSTAL APPARATUS AND DISPLAYING METHOD USING THE SAME

Publication numbe Publication date: Inventor(s):			
Inventor(s):		4.00 Telephone 1	
0.000	<ul> <li>TAKIGUCHI TAKAO,</li> <li>KOSAKA YOKO NAF</li> </ul>	IWAKI TAKASHI TOKANGU GOLL KAMURA SHINIDHI +	u.
Applicant(s):	CANON RRA		
Classification:	the control of the control of the	And the second second	- 14-11-1
- international:	compressor compre	33/24: C07D413/10: C07D437/10:	- 11
	C09K19/34; G02F1/1 C07D413/00; C07D4	3, G02F1 (37, G02F1/441; C07D26 (7/80; C09K19/34; G02F1/13; (FC C-62/24; C67F415/10; C07D27 ///	
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Abstract of JP 8151	1578 (A)		
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compound effective		R1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
	ntaneous polarization,	0-6	
	siveness, reduction of	8	1
	dance of response rate		
and high contrast a			
optical shutters, etc	CONSTITUTION: This		
optical shutters, etc compound is expres	o, CONSTITUTION; This seed by formula I [R1 is		12
optical shutters, etc compound is expre- a straightchain, brai	o, CONSTITUTION; This ssed by formula I [R1 is nohed or cyclic 2-20C		13
optical shutters, etc compound is expre- a straightchain, bra- alkyl (CH2 in the all	b, CONSTITUTION: This seed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted		re
optical shutters, etc compound is expre- a straightchain, bra- alkyl (CH2 in the all with O, S, CO, etc.,	o, CONSTITUTION: This seed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted without being adjacent		ij
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optical shutters, etc compound is expres a straightchain, brai alkyl (CH2 in the all with O, S, CO, etc., to a hetero atom an oe substituted with	b. CONSTITUTION: This ssed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted without being adjacent the CH3 in the alkyl may CH2 F, etc.); R2 is a		13
ptical shutters, etcompound is express straightchain, braidly (CH2 in the all with O, S, CO, etc., o a hetero atom an se substituted with traight-chain, bran, bran,	b. CONSTITUTION: This seed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted without being adjacent id CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C	Distriction (Co.)	10 :ni
ptical shutters, etcompound is express straightchain, braidly (CH2 in the all with O, S, CO, etc., o a hetero atom an se substituted with traight-chain, bran, bran,	b. CONSTITUTION: This ssed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted without being adjacent the CH3 in the alkyl may CH2 F, etc.); R2 is a	Distriction (Co.)	173
optical shutters, etcompound is expreta a straightchain, brai alkyl (CH2 in the all with O, S, CO, etc., to a hetero atom an be substituted with straight-chain, bran- alkyl (CH2 in the all	b. CONSTITUTION: This seed by formula I [R1 is inched or cyclic 2-20C kyl may be substituted without being adjacent id CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C	Distriction (Co.)	183 :110
optical shutters, etcompound is expreid a straightchain, bradalkyl (CH2 in the all with 0, S, CO, etc., to a hetero atom and sea substituted with straight-chain, branalkyl (CH2 in the all with 0, S, CO, etc., to S, CO, etc., to S, CO, etc., to S, CO, etc., to show the straight-chain, branalkyl (CH2 in the all with 0, S, CO, etc., to	b. CONSTITUTION: This seed by formula   [R1 is nohad or eyclic 2-20C kyl may be substituted without being adjacent dc CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C kyl may be substituted without being adjacent	Distriction (Co.)	107 201
ptical shutters, etc compound is expressible, in a straightchain, bra- alkyl (CH2 in the all with O, S, CO, etc., to a hetero atom an one substituted with straight-chain, bran- alkyl (CH2 in the all with O, S, CO, etc., o a hetero atom); A	b. CONSTITUTION: This seed by formula   [R1 is nohad or eyclic 2-20C kyl may be substituted without being adjacent dc CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C kyl may be substituted without being adjacent	E CH - CH	707 - 716
ptical shutters, etc compound is expressible in straightchain, bra alkly (CHZ in the all with O, S, CO, etc., o a hetero storn an oe substituted with braight-chain, bran alkly (CHZ in the all with O, S, CO, etc., o a hetero atom); A substituted with on	o. CONSTITUTION: This seed by formula I [R1 is nohed or cyclic 2-20C kyl may be substituted without being adjacent d CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C kyl may be substituted without being adjacent 11 is 1,4-phenylene e or two groups such as	E. CH - CH.	103 .116
pitical shutters, etc compound is expreins straightchain, brankly (CH2 in the all with 0, S, CO, etc., o a hetero atom an escubstituted with traight-chain, brankly (CH2 in the all with 0, S, CO, etc., o a hetero atom); A sutting of the control of	o. CONSTITUTION: This ssed by formula I [R1 is nohad or cyclic 2-20C kyl may be substituted without being adjacent of CH2 F, etc.); R2 is a ched or cyclic 2-20C kyl may be substituted without being adjacent at 15 1,4-phenylene e cohexylene, etc.; *	E CH - CH	: 10 i
potical shutters, etc compound is expressible to straightforhain, braility (CH2 in the all with O, S, CO, etc., o a hetero atom an esubstituted with traight-chain, brandley (CH2 in the all with O, S, CO, etc.) o a hetero atom); A substituted with on the substituted with one to a top the substituted with one to a fatero atom); A substituted with one to a fatero atom, a substituted with one a fatero atom, a substituted with a subst	o. CONSTITUTION: This seed by formula I [R1 is nohed or cyclic 2-20C kyl may be substituted without being adjacent d CH3 in the alkyl may CH2 F, etc.); R2 is a ched or cyclic 2-20C kyl may be substituted without being adjacent 11 is 1,4-phenylene e or two groups such as	E. CH - CH.	.11
pitical shutters, etc compound is expreia straightchain, brailsly! (CH2 in the all with 0, S, CO, etc., o a hetero atom an es substituted with straight-chain, branalky! (CH2 in the all with 0, S, CO, etc., o a hetero atom); A substituted with on F; A2 is A1, 1, 4-cys epresents optical 2-decylcourneran-5-	seed by formula [R1 is nothed or cyclic 2-20C kyl may be substituted without being adjacent d CH3 in the alkyl may ched or cyclic 2-20C kyl may be substituted without being adjacent 1 is 1,4-phenylene e or two groups such as clohexylene, etc.; "cktwly, e.g. (SR)-3-44-	E. CH - CH.	H H
pitical shutters, etc compound is expre- a straightchain, bra  alkith (C+12 in the all  kith (C, C+12 in the all  kith (C,	o. CONSTITUTION: This seed by formula   [R1 is nohed or cyclic 2-20C   (yll may be substituted without being adjacent dc H3 in the alkyl may be CH2 F, etc.); R2 is a ched or cyclic 2-20C   (yll may be substituted without being adjacent A1 is 1,4-phenylene e or two groups such as clohexylene, etc.)* (ctivity); e.g. (SR)-3-4-5-yil)phenyl-5-cctyl-2-compound of formula	E. CH - CH.	123 .164
optical shutters, etcompound is expre- sompound is expre- sisting the high properties of the state of the with O, S, CO, etc., to a hetero atom an established with straight-chain, bran alkyl (CH2 in the all with O, S, CO, etc., o a hetero atom); A substituted with O, S, CO, etc., or a hetero atom); A substituted with O, S, CO, etc., or hetero atom; A substituted with O, S, CO, etc., or hetero atom, persente optical as a substituted with O, S, CO, etc., or hetero atom, persente optical as a substituted with O, S, CO, etc., or hetero atom); A substituted with O, S, CO, etc., or hetero atom, or het	o. CONSTITUTION: This sased by formula   [R1 is nothed or cyclic 2-20C   (b) may be authorized without being adjacent of CH3 in the sliqy may be called or cyclic 2-20C   (c) may be substituted without being adjacent 1 is 1-4; phenylene e or two groups such as cohexylene, etc.)** (cdwty), e.g. (5R)-3-4; phenyl-15-cctyl-2-compound of formula!	E. CH - CH.	TEST
compound is expre- a streighthain, bra- alkyl (CH2 in the all aikyl (CH2 in the aikyl (CH2 in the aikyl the	o. CONSTITUTION: This seed by formula   [R1 is nohed or cyclic 2-20C   (yill may be substituted without being adjacent dc H3 in the sliv) may be ched or cyclic 2-20C   (yill may be substituted without being adjacent A1 is 1,4-phenylene e or two groups such as clohexylene, etc.; "ctutyly, e.g. (SR)-3-(4-5-yil)phenyl-5-cotyl-2-compound of formula   ling a compound of mpound of formula   ling a compound of formula   ling a comp	E. CH - CH.	eg .ni
optical shutters, etc. optical shutters, etc. optical shutters, etc. a straightchain, bra alkiyi (CH2 in the all with O, S, CO, etc., to a hetero atom an escuperituded with traightchain, bran shutter of the alkiyi (CH2 in the all with O, S, CO, etc., to a hetero atom); A substituted with on the all with O, S, CO, etc., to a hetero atom); A substituted with on the all with O, S, CO, etc., to a hetero atom); A substituted with on the all with O, S, CO, etc., and a substituted with on the all with one of	o. CONSTITUTION: This sead by formula [FR is nohed or cyclic 2-20C [Vir may be substituted without being adjacent do H3 in the aliqui may CH2 F, etc.); R2 is a ched or cyclic 2-20C [Vir may be substituted without being adjacent 1 is 1,4-phenylene or or two groups aliqui may be substituted to the cyclic and the cyclic an	E. CH - CH.	isi .iii